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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------------|------------------|
| 10/815,922 | 04/02/2004 | Hideki Tominaga | D-1587 | 9419 |
| 7590 09/09/2005 KANESAKA AND TAKEUCHI 1423 Powhatan Street Alexandria, VA 22314 | | | EXAMINER VERBITSKY, GAIL KAPLAN | |
| | | | ART UNIT 2859 | PAPER NUMBER |

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,922

Applicant(s)

TOMINAGA ET AL.

Examiner

Gail Verbitsky

Art Unit

2859

[Signature]

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/02/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of 35 U.S.C. 102(e) which forms the basis for all obviousness rejections set forth in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6 are finally rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (U.S. 20040208230A1) [hereinafter Lee].

Lee discloses in Fig. 3A-3D a two color/ two wavelengths (visible/ infrared) thermometer comprising a light receiving means (one image pickup) 31 being a CCD, inherently, having a plurality of micro-photo elements (pixels), inherently, arranged two-dimensionally. The thermometer also comprises a light separating means (light diverging means) 32 separating/ diverging light onto an IR detecting means (first area) 33 and a visible light detecting means (second area) 34 of the CCD. The fact that the thermometer has a display for displaying a temperature corresponding to IR radiation and visible light (page 3, claim 19) acquired by the CCD, would imply that the thermometer has some temperature calculating/ processing means electrically connected to said image pick up device 31.

The device further comprises a wave limitation device including an infrared (first) filter 36 and a visible (second) filter 37, and formed in front (front side) of the image pickup

Art Unit: 2859

device comprising an IR detecting means and a visible light detecting means 33 and 34 respectively, as shown in Fig. 3D.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Fontenot et al. (U.S. 5910816) [hereinafter Fontenot].

Fontenot discloses in Fig. 1 a device comprising directing a visible (first wavelengths) and IR (second wavelengths) rays from light diverging/ separating means an imaging lens directing light to a CCD (one image pickup device/ two-dimensional arrangement of pixels/ micro photo receiving elements) having light receiving surface including two areas, first area of the light receiving surface of the CCD is designated for first wavelengths (visible light) and second area is designated for second wavelengths (IR). The light diverging means comprises a prism 2 having two edges (two prism surfaces, thus, acting as two prisms), the edges (two prisms) are equipped with a (first) filter 4 to block IR and a (second) visible light blocking filter 14a, the filters 4 and 14a constituting a wave limitation means directing said visible light and said IR to their respective first and second areas (col. 2, lines 65-67 and col. 3, lines 1-7). The device also comprises a display where the images corresponding the two wavelengths are recombined and displayed. This would imply, that the device comprising some means (processing electronics 8, 16/ temperature calculating means) for processing images

Art Unit: 2859

and making them understandable for an operator in terms of at least IR/ thermal image, which is representative of temperature of the object of interest.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Fontenot in view of Chen et al. (U.S. 20030227680) [hereinafter Chen].

Fontenot discloses the device as stated above.

Fontenot does not explicitly teach that the light diverging means includes a first polarizing beam splitter and a second polarizing beam splitter, as stated in claim 4 with the remaining limitations of claim 5.

Chen discloses a device comprising a first polarizing beam splitter and second polarizing beam splitter to receive and polarize different spectrum (wavelengths).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Fontenot, so as to have the first and second beam splitters, as taught by Chen, so as to effectively separate the spectrum, in order to provide more accurate results.

Response to Arguments

Art Unit: 2859

7. Applicant's arguments filed on June 21, 2005 have been fully considered but they are not persuasive.

Applicant states that Lee and Fontenot each employ two distinct detectors, while the present invention employs a single CCD sensor. This argument is not persuasive because this limitation is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable.

Constant v. Advanced Micro-Devices, Inc., 7 USPQ2d 1064.

By claiming "one image pickup device", applicant does not limit the invention to a single pickup device.

Applicant states that the instant invention allows a cross-talk to be prevented. This argument is not persuasive because this limitation is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc., 7 USPQ2d 1064.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2859

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Verbitsky whose telephone number is 571/ 272-2253. The examiner can normally be reached on 7:30 to 4:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571/ 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GKV

Gail Verbitsky
Primary Patent Examiner, TC 2800



August 25, 2005